

AMENDMENTS TO THE CLAIMS

1-38 (Cancelled).

39. (New) A method of displaying the results of sociometric analysis of a group of schoolchildren wherein schoolchildren nominate peers in response to social preference questions, comprising:

displaying Cartesian coordinate axes indicating values of two sociometric parameters;
plotting points representing schoolchildren in a two-dimensional scatterplot diagram
whereby the position of each points corresponds to values of the sociometric
parameters associated with each schoolchild; and

displaying a plurality of two-dimensional areas of the scatterplot diagram corresponding
to predetermined sociometric social classifications defined by ranges of values of
the two sociometric parameters, whereby points falling within the areas represent
schoolchildren classified into the corresponding sociometric social classifications.

40. (New) The method of claim 39, wherein points representing selected schoolchildren are highlighted on the scatterplot diagram.

41. (New) The method of claim 40, wherein pairs of points representing schoolchildren having reciprocal nominations are highlighted on the scatterplot diagram.

42. (New) The method of claim 39, wherein the two sociometric parameters are normalized values of Liked Most and Liked Least.

43. (New) The method of claim 42, wherein the abscissa axis indicates normalized Liked Least values and the ordinate axis indicates normalized Liked Most values.

44. (New) The method of claim 43, wherein the indicated sociometric social classifications and their corresponding areas with respect to the axes comprise:

Controversial, located within the first quadrant;
Popular, located within the second quadrant;
Neglected, located within the third quadrant; and
Rejected, located within the fourth quadrant.

45. (New) The method of claim 44, wherein the indicated sociometric social classifications and their corresponding areas with respect to the axes further comprise:

Average, spanning all four quadrants.

46. (New) A method of sociometric analysis of a group of schoolchildren, comprising:
surveying the schoolchildren to obtain peer nominations to social preference questions;
analyzing the peer nominations to generate standardized Liked Most (zLM) and Liked Least (zLL) metrics for each schoolchild;
generating standardized Social Preference (zSP) and Social Impact (zSI) scores from the zLM and zLL metrics;
classifying each schoolchild into one of a plurality of mutually exclusive sociometric social classifications based on the zSP, zSI, zLM, and zLL values; and
generating a probability score for each schoolchild indicative of the probability of the schoolchild being classified in each sociometric social classification upon re-assessment.

47. (New) The method of claim 46 wherein the probability of each schoolchild's Social Preference score upon re-assessment would fall within the numeric ranges of greater than +1, less than -1, between -1 and +1, and between -.5 and +.5, are respectively:

$$PzSPPos1 = P(zSP) > 1 = \text{cdf}(zSP - 1);$$

$$PzSPNeg1 = P(zSP) < -1 = \text{cdf}(-1 - zSP);$$

$$PzSPNominal = P(-1 < zSP < 1) = 1 - PzSPPos1 * 1 - PzSPNeg1; \text{ and}$$

$$PzSPAverage = P(-.5 < zSP < .5) = (1 - \text{cdf}(zSP - .5)) * \text{cdf}(.5 + zSP);$$

where $\text{cdf}()$ denotes a cumulative density function.

48. (New) The method of claim 47 wherein the probability of each schoolchild's Social Impact score upon re-assessment would fall within the numeric ranges of greater than +1, less than -1, between -1 and +1, and between -.5 and +.5, are respectively:

$$PzSIPos1 = P(zSI) > 1 = \text{cdf}(zSI - 1);$$

$$PzSINeg1 = P(zSI) < -1 = \text{cdf}(-1 - zSI);$$

$$PzSINominal = P(-1 < zSI < 1) = 1 - PzSIPos1 * 1 - PzSINeg1; \text{ and}$$

$$PzSIAverage = P(-.5 < zSI < .5) = (1 - \text{cdf}(zSI - .5)) * \text{cdf}(.5 + zSI);$$

where $\text{cdf}()$ denotes a cumulative density function.

49. (New) The method of claim 48 wherein the probability of each schoolchild's Liked Most and Liked Least scores upon re-assessment being greater or less than zero, are respectively:

$$PzLMPos = P(zLM > 0);$$

$$PzLMNeg = 1 - PzLMPos;$$

$$PzLLPos = P(zLL > 0); \text{ and}$$

$$PzLLNeg = 1 - PzLLPos.$$

50. (New) The method of claim 49 wherein the probability score for each schoolchild indicative of the probability of the schoolchild being classified in each sociometric social classification upon re-assessment are calculated as:

$$P(\text{Popular}) = PzSPPos1 * PzLLNeg * PzLMPos;$$

$$\begin{aligned}P(\text{Rejected}) &= PzSPNeg1 * PzLLPos * PzLMNeg; \\P(\text{Neglected}) &= PzSINeg1 * PzLLNeg * PzLMNeg; \\P(\text{Controversial}) &= PzSIPos1 * PzLLPos * PzLMPos; \\P(\text{Average}) &= PzSPAverage * PzSIAverage; \text{ and} \\P(\text{Unclassified}) &= (PzSINominal * PzSPNominal) - P(\text{Average}).\end{aligned}$$

51. (New) The method of claim 50 further comprising calculating the total probabilities as
$$\text{TotalP} = P(\text{Popular}) + P(\text{Rejected}) + P(\text{Neglected}) + P(\text{Controversial}) + P(\text{Average}) + P(\text{Unclassified}).$$

52. (New) The method of claim 51 further comprising calculating the relative probability of each schoolchild's sociometric social classification upon re-assessment as:

$$\begin{aligned}RP(\text{Popular}) &= [P(\text{Popular}) / \text{TotalP}] * 100; \\RP(\text{Rejected}) &= [P(\text{Rejected}) / \text{TotalP}] * 100; \\RP(\text{Neglected}) &= [P(\text{Neglected}) / \text{TotalP}] * 100; \\RP(\text{Controversial}) &= [P(\text{Controversial}) / \text{TotalP}] * 100; \\RP(\text{Average}) &= [P(\text{Average}) / \text{TotalP}] * 100; \text{ and} \\RP(\text{Unclassified}) &= [P(\text{Unclassified}) / \text{TotalP}] * 100.\end{aligned}$$

53. (New) The method of claim 52 further comprising calculating strength scores for each schoolchild and each sociometric social classification indicative of the degree to which the schoolchild's sociometric classification is likely to remain the same or change in future re-assessments as:

Highly Fixed if $RP(\text{classification}) > 75$;
Fixed if $50 < RP(\text{classification}) < 75$; and
Fluid if $RP(\text{classification}) < 50$.